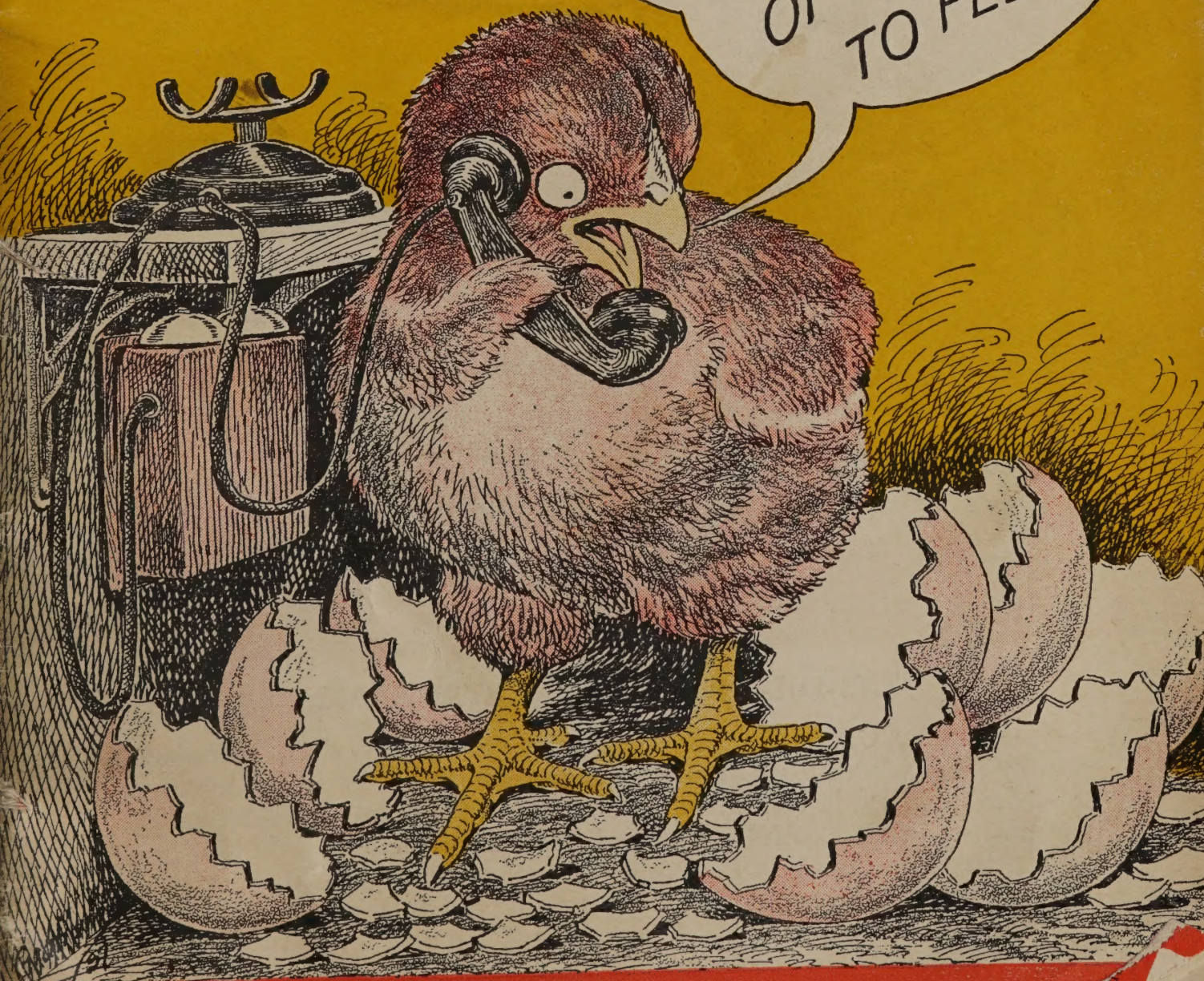


RAISE MORE AND BETTER CHICKS THIS YEAR

HEY! HURRY THAT
FUL-O-PEP CHICK
STARTER! THERE
ARE A LOT
OF CHICKS
TO FEED!



Where Ful-O-Pep Feeds are in daily practical test



THE FUL-O-PEP EXPERIMENTAL FARM

The Quaker Oats Company maintains, at Libertyville, Illinois, a poultry farm where Ful-O-Pep Feeds and the Ful-O-Pep Feeding Program are thoroughly tested. It is here that the restricted mash feeding program was first carefully checked before we recommended it. We believe that the saving in feed and the better quality of pullets reared will be worth thousands and thousands of dollars to Ful-O-Pep feeders.



A Fine Lot of Chicks on the Burnham Poultry Farm, Corsica, Pa.

Low Cost Rearing Program

ARE you really interested in raising fine, big, capable pullets, with a minimum in feed cost? Are you willing to wait until the pullets are six or seven months old before they lay their first egg? Do you want a lower mortality in the laying house? If you can answer "yes" to these questions, you are interested in Ful-O-Pep Feeds and the Ful-O-Pep Feeding Program.

There are some poultrymen who apparently are not interested in these, for in the first place they want a program that requires a minimum of labor, both physical and mental. Other poultrymen are in a race to see how quickly they can get their pullets into production, even though they lay small or peewee eggs. They are not concerned about mortality until it mounts up month after month.

***Raising
Pullets Is
Not a Race***

FUL-O-PEP PUT TO TEST: "You may be interested in a feeding test we recently ran on Ful-O-Pep Chick Starter in comparison to a 'just as good' cheap feed. We took 1,000 chicks from the incubator and divided them into two lots. At the end of two weeks, the records showed that the Pep birds consumed 49 pounds of feed and the others 75 pounds. When the chicks were counted it was found the Pep lot contained 26 more chicks than the other. The Pep chicks showed not over 1% mortality, were strong and vigorous while the others were in bad shape, weak legged and poorly developed. These chicks were then placed on Pep and within a week all of them were walking. They are now six weeks old. The results of the test show conclusively that it is not good economy to be price-minded with regard to feed." Robert G. Burnham, Burnham Poultry Farm, Corsica, Pa.



J. J. Johnson, Conyers, Ga., May Be Proud of These Pullets

Poultrymen have been using altogether too much feed in rearing their pullets. They never let them get hungry. Keeping feed before the young birds all the time is hard on the pocketbook and isn't good for the chickens.

As far as we know, there isn't any other kind of livestock that has feed available all the time. You wouldn't do it with your own youngsters, so why spoil your pullets by wasting feed on them?

**Limit
Their
Feed**

We are convinced that keeping the mash hoppers filled all the time is utterly wrong. We believe that during the first few weeks of brooding, the chicks should have mash in front of them all day unless they show signs of inactivity. The mash should then be taken away for two or three hours or until they get really hungry.

After chicks are six to eight weeks old and running out on a grass range, they are far healthier and happier if given only enough mash to last them for two or three hours in the morning, enough oats to last them for three to four hours, and a light feeding of grain at night. This will encourage the birds to go hunting for feed. A hungry bird is a good forager.

FINDS FUL-O-PEP WAY ECONOMICAL: "Thanks to the Ful-O-Pep Way of feeding. Since feeding Ful-O-Pep Feeds and whole oats to my flock I have not only greatly reduced the cost of feeding but have a healthier, more productive flock. Every poultry man should try hopper feeding oats. Once he gives it a trial he will find how helpful and economical it is. My pullets raised last year the Ful-O-Pep Way have laid from 70 to 75% all year." J. J. Johnson, Conyers, Ga.

Grass is one of the cheapest food nutrients we can supply chickens. It is rich in vitamins and minerals, contains bulk, helps to grow good bones and feathers, and develops a sound digestive tract. Chickens that have feed before them all the time will eat little grass but by restricting the feed we encourage the birds to eat lots of grass. We don't know of any cheaper or any better way to raise fine pullets.

If you do not happen to be fortunate enough to have a grass range for the young stock, you cannot follow the restricted feeding program we have been talking about, but we believe you will raise much better pullets if you will let the hoppers run empty three or four hours a day after the pullets are six to eight weeks old. You will have to use your own good judgment as to how much to feed.

After two years experience at our research farm, we believe it is a highly desirable practice to feed the young stock nothing one day a week after they are eight to ten weeks old. When there is a good grass range it is even possible to feed the pullets only every other day and force them to hunt for the feed on the odd days. We do not think it practical or feasible to do this with birds in confinement or on bare ground or where the grass is particularly tough.

Following this restricted feeding program the pullets do not mature as early but they grow a good deal bigger, stronger, and healthier, have better color in shanks, cleaner, brighter eyes, better feathers and are remarkably free from parasites such as tape worms.

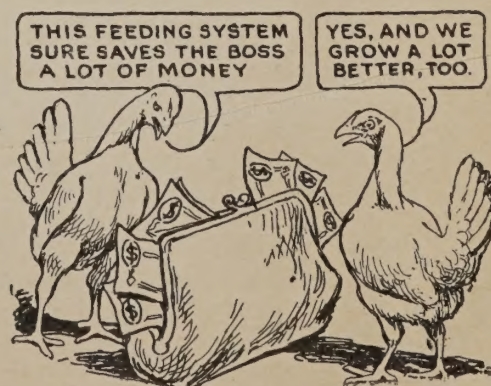
Undoubtedly nature's way of eliminating parasites is to let the birds get hungry once in a while. When we keep the hoppers jammed full of feed all the time, we never give the birds an opportunity to get rid of the parasites or keep their digestive tracts in such a condition that it is unfavorable for parasites. Restricted feeding is a very much better way of handling parasites than to attempt eliminating them after they have gained a foothold.

We used to think that a feed cost of 50 to 60 cents per bird for raising a pullet, as reported by some farms, was impossible. This is quite true if you keep feed in front of the young stock all the time. It is not only possible to raise good pullets on this low feed cost, but it is what you should expect in the way of feed costs when you restrict the feed for pullets on range during the greater part of the growing period.

With pullets bred for speed of production and growth as they are today,

*Use
Common
Sense*

*Helps to
Eliminate
Parasites*



**Hold
Pullets
Back**

we must restrict their feed or they will come into production at four months of age or even younger. By restricting the feed we may easily hold these same pullets back until they are six to eight months old. Such pullets will not only lay a much bigger egg, but will have the ability to keep on laying continuously month after month.

While an occasional pullet will start to lay at an early age, we believe that less than 10 per cent of your flock should be laying at six months of age. If you want pullets in production by the first of September, be sure to hatch them before March 1.

Instead of taking more feed to hold your pullets back from production until they are six to eight months old, we are confident that it takes less feed. Incidentally, early hatched chicks that are allowed to mature normally are much less apt to go into a fall molt and will certainly lay nice big eggs right from the start.

**Liberal
Feeding
of Oats**

On this restricted feeding program for young stock there is nothing that will do the job like liberal feeding of oats. Oats produces the quality of bone, flesh, and feathers that is so necessary for heavy, continuous egg production in the laying house. Oats also help to eliminate parasites because they increase the acid content in the gizzard and help to keep the intestines distended. Then, too, the fibre content of oats tends to eliminate constipation.

In following the liberal feeding of whole oats it is especially important to feed a granite grit with black specks of mica so the birds surely eat the grit freely. Proper grit is important in grinding the grass, grain, and oats so the birds will use their feed economically.

**Ful-O-Pep
Mashes
Go Further**

We know from results at our farm and from reports from hundreds of poultrymen that Ful-O-Pep Chick Starter, Ful-O-Pep Growing Mash and Ful-O-Pep Developer fit into this restricted feeding program exceptionally well. These mashes are built around oatmeal, and there isn't anything that is a digestible or that will go as far from a feeding standpoint as oatmeal. Ful-O-Pep Mashes actually go further than other feeds.

Ful-O-Pep Mashes are designed to grow big, sound, capable pullets and do it on a low mash consumption basis. We do hope that you will give them a trial this year as we are confident that you will raise the finest pullets you have ever raised, and do the job at a low feed cost. If you will follow the Ful-O-Pep Feeding Program we know that you will like the pullets and the size of eggs when they come into production.



A Promising Lot of Pullets Owned by C. Wolf, Uhrichsville, Ohio

Don't Waste Feed

MOST chicken men feed growing chicks altogether too much feed. They have been feeding the manure pile better, so to speak, than they have been feeding the chickens.

If you keep feed in front of chicks, they will stand and eat and eat and eat. That does not mean that they would not grow better and be happier and healthier if they got hungry once in a while. Frankly, we have found from experience that the reverse is true.

*Delaware
Reports on
94 Flocks*

In a bulletin issued this past year by the Delaware Experiment Station, figures were given for the amount of feed consumed when the feed was restricted and when the pullets had feed in front of them all the time. These figures were for birds running out on a grass range and were taken from 94 flocks averaging over 400 pullets per flock.

7 YEARS ON FUL-O-PEP: "My success with Ful-O-Pep Feeds has been so good that I'm writing you a line and enclosing a picture. These chicks are 11 weeks old. The cockerels from this lot weighed $2\frac{1}{4}$ pounds each at 9 weeks. I started 565 baby chicks this year and my mortality has been less than $1\frac{1}{2}\%$. I have been a consistent user of Ful-O-Pep Feeds for 7 years and would not consider any other feed or any other program." C. Wolf, Uhrichsville, Ohio.



Raised the Ful-O-Pep Way by Mrs. A. C. Knupp, Vinton, Ia.

They showed that when pullets were raised on a total of twenty pounds of feed (43.8% mash) their average weight at five months of age was 3.05 pounds. Pullets that were fed thirty-four pounds of feed (62.3% mash) had an average weight of 3.15 pounds at five months of age. This makes a difference of one-tenth of a pound per bird in weight for the fourteen extra pounds of feed consumed. Bear in mind that a good percent of this extra feed consumed is mash.

**Mortality
Greater on
Heavy
Feeding**

The mortality for the birds that were freely fed was six per cent greater during the rearing period than for the birds on the restricted ration. Because of the restriction in mash and the higher percentage of grain fed, it only cost 33 cents for feed per pullet on the twenty pounds of feed group, and 58 cents per pullet where feed was kept before the birds all the time.

The chances are that the pullets that were restricted in feed had a little less abdominal fat and had more frame and more flesh and that they actually developed into bigger birds.

CONSIDERS FUL-O-PEP BEST ON MARKET: "I have used Ful-O-Pep feeds for my baby chicks and laying hens for a number of years. I consider it the best feed on the market and also the most economical for the farmer because he can use so much of the home grown grains with it. On March 15, I started 508 baby chicks on Ful-O-Pep Feeds. They are now 8 weeks old and I have 500 well developed birds. I consider it a perfect feed for baby chicks." Mrs. A. C. Knupp, Vinton, Iowa.

Slower growth does not mean smaller birds when they are mature. We strongly believe that the contrary is true. We find that the birds have good body size and have the resistance to avoid disease invasion.

Many poultrymen say that it is impossible to hold the pullets back from laying at a certain age. Actually it is very easy to retard the date of the first egg if you will simply restrict the amount of feed given. If the feed is restricted enough, it is possible to hold off laying just as long as desired.

Frankly, we do not know how far feed can be restricted with birds grown in confinement or on bare ground. We are confident, though that the birds will be far healthier and happier, grow better, be freer from parasites, and be bigger if they are permitted to become thoroughly hungry in the afternoon before the grain is fed after they are six to eight weeks old.

We do not think that it is advisable to greatly restrict the feed of chicks under ten to twelve weeks of age, although if they are allowed to occasionally become hungry it helps to overcome the tendency toward constipation. An active chick is never a constipated chick, and nothing probably makes a chick quite as active as being hungry.

On a restricted feeding program, we believe that a grass range and whole oats play a very important part. Grass is one of the best feeds that we can give chicks, as well as one of the cheapest. The oats give the gizzard work to do, keep the intestines distended, and help to grow strong, sound, healthy pullets.

We believe the Ful-O-Pep Way is the most economical and the most profitable way for any poultryman to raise his pullets. For best results feed Ful-O-Pep Mashies according to our restricted feeding plan.

Ful-O-Pep Feeds and the Ful-O-Pep Feeding Plan have been thoroughly tested to work together. They not only save feed, but will help you grow a really superior lot of pullets at a low feed cost. Until you have actually tried Ful-O-Pep Mashies and fed them the Ful-O-Pep Way you don't appreciate how reasonably good pullets may be raised. Don't fail to read what Ful-O-Pep users have to say about Ful-O-Pep Mashies and the Ful-O-Pep Feeding Program. They are speaking from actual experience. Decide to grow the Ful-O-Pep Way the finest lot of pullets that you have ever raised and on a lower feed cost.

*Laying
Can Be
Delayed*

*Grass and
Whole Oats
Important*





A Fine Healthy Flock of White Rocks Owned by Chas. W. Krell, Springfield, Ill.

Oats For Sound Growth

FOR centuries farmers have known and appreciated the value of oats from the standpoint of feeding young stock of all kinds. Corn and oats are the two grains principally used in poultry and live stock rations. They are really the two feed grains. Consequently, there is always a great tendency to compare the two as to their nutritive values in livestock feeding.

***Oats Is
Superior
to Corn***

In many ways oats has been shown to be remarkably superior to corn from a growth standpoint. Only recently it was pointed out that corn is deficient in manganese and oats is one of the good sources for this mineral. Chicks develop slipped tendons or crooked legs, and eggs may fail to hatch, when there is a deficiency of manganese in the ration. In other words, oats is decidedly superior to corn in growing sound bones.

WELL SATISFIED WITH FUL-O-PEP: "On March 15, I purchased 400 White Rock chicks and started them on Ful-O-Pep Chick Starter. At the age of 8 weeks these chicks average two pounds in weight and we only had lost ten chicks. This is one of the finest flocks of chicks that I have raised and I strongly recommend the Ful-O-Pep Way of Feeding." Chas. W. Krell, Springfield, Illinois.



Whispering Pines Poultry Farm, Mount Kisco, N. Y. Feeds the Ful-O-Pep Way

Oats has also been found to contain a gizzard erosion factor that is not found in corn. This factor helps to prevent the formation of ulcers and a thickening of the gizzard lining. Chickens fed an all mash ration which is especially high in corn are quite apt to develop the ulcerated condition of the gizzard.

It would seem that this trouble is partly nutritional and partly mechanical. It is possible that the gizzard erosion factor is nothing other than the degree of acidity in the gizzard. Oats develop a high degree of acid in the intestinal tract as compared to corn. Incidentally, we believe that a high degree of acidity in the gizzard provides protection for the birds against all types of bacterial and parasitic invasion.

It is believed that oats also contains an anti-cannibalism factor which is not contained in corn. Chicks fed heavily on

ENDORSES FUL-O-PEP FEEDING PROGRAM: *"We wish to express our enthusiastic endorsement of the Ful-O-Pep feeding program, for raising young stock. We started our chicks on Ful-O-Pep Starter and are growing them on Ful-O-Pep Growing Mash and Developer. By feeding whole oats and scratch grains and by restricting the mash feeding we have had a very low mortality and an exceptionally fine lot of pullets. Our 1400 pullets show no signs of worms though being raised on ground that has been used for nearly 20 years. We attribute this to the feeding of whole oats. The oat feeding has materially cut our total feed cost also."* Thomas Donnelly, Whispering Pines Poultry Farm, Mount Kisco, N. Y.

**Oats
Increases
Acidity**

corn develop a great deal of feather picking and this often-times leads to vent picking and pick-outs. Chicks grown under similar conditions but receiving a ration heavy in oats do not develop these vices to any extent. When you do run into cannibalism you can ordinarily trace it to some other factor such as overcrowding or overheating of the brooder.

Recent research work has shown that adding lime to a feed makes chicks much more susceptible to coccidiosis. With oats apparently developing a high degree of acid in the gizzard, it is fair to assume that it gives greater protection against coccidiosis invasion. On the same basis, a heavy oat ration will give greater protection from tapeworms and other types of internal parasites.

**Research
Workers
Find Oats
Superior**

From the standpoint of fattening, corn will put fat on chickens more quickly than oats or any other grain. Corn produces abdominal fat which is a soft fat. Since oats does not deposit immense amounts of fat in the abdomen, an oat-fed flock will have much less trouble from blowouts which so frequently leads to cannibalism. Furthermore, we believe the birds that do not have large deposits of fat in the abdomen and on the heart and gizzard will live longer, lay better, and be far more profitable.

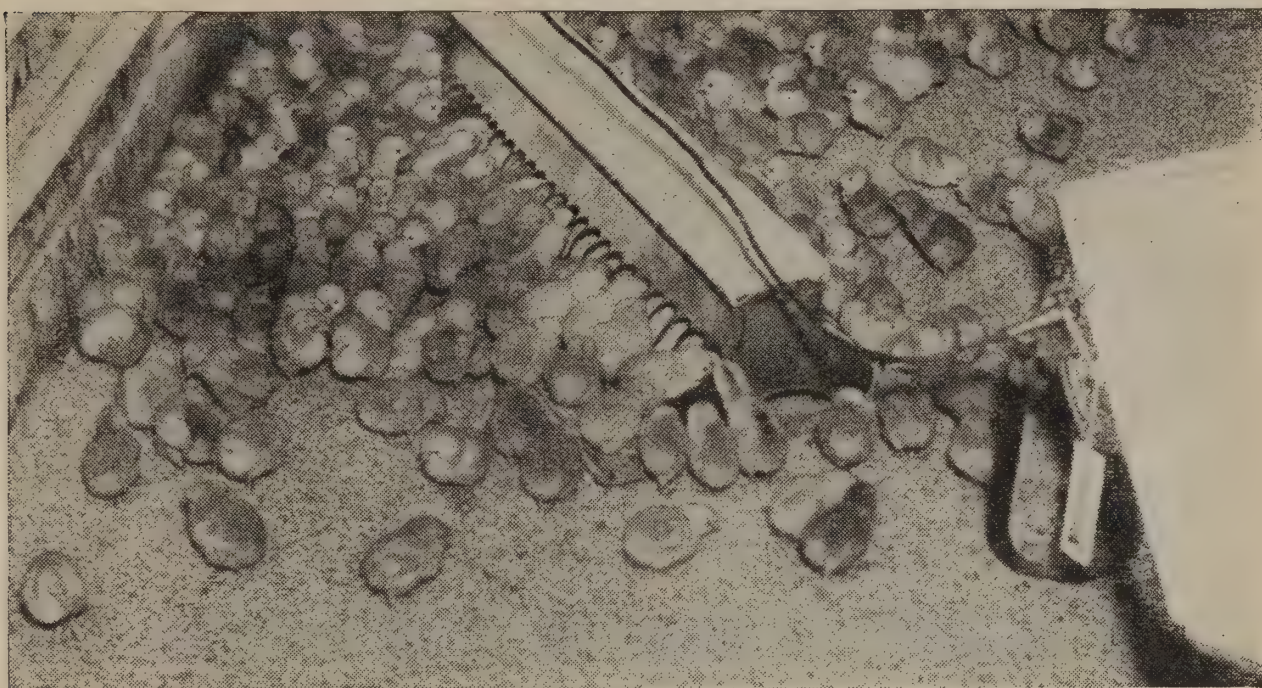
With so many state experiment stations, such as Ohio, Wisconsin, Iowa, Western Washington, Ontario, and California, continuing to pile up favorable evidence for oats as compared to corn, we believe that more and more poultrymen will make oats an important part of their ration.

Without a question, feeds that carry a fair amount of oat products will grow sounder pullets. If you want to be sure of raising big capable pullets, don't fail to use a feed that is built around oats, or better still, oatmeal.

Ful-O-Pep Feeds have for years been built around oatmeal. We have always felt that this cereal grain was superior to other grains for raising chickens. If you want to be certain of raising good pullets, be sure to feed a ration rich in oatmeal. It helps build stamina and laying ability into your pullets.



Combined with the oatmeal, we carry the other essential food nutrients in proper proportion to insure sound, economical growth. No expense has been spared in incorporating the necessary health-giving, body building ingredients.



A Busy Brooder at Phillipsdale Farm, Valley Forge, Pa.

Successful Brooding of Chicks

MOST of us could do a very much better job of brooding if we did not use so much heat. We think of a baby chick as being very delicate so we pour on the heat in the brooder. The result is that we make the chicks inactive and constipate them.

As chicks are moved into the brooder they need a temperature of about 90 degrees. After two or three days this may be lowered about 1 degree a day so they will be perfectly happy in a temperature of 65 to 70 degrees when three to four weeks old.

Keep chicks just as cool as possible and still keep them comfortable. By keeping chicks too warm you are actually wasting money besides seriously injuring them.

A variety in temperature in the brooder house is highly desirable. This gives the chicks an opportunity to get away from the heat if they want to. Chicks that can go from the warm brooder into a colder part of the brooder house are

*Keep
Tempera-
ture Down*

FINDS FUL-O-PEP BIRDS SUPERIOR: "This is the second year we have fed Ful-O-Pep Mash and followed faithfully the Ful-O-Pep Feeding Program. The growth and production of our birds is by far the best we have ever experienced." Albert Yocum, Mgr., Phillipsdale Farm, Valley Forge, Pa.

*Range In
Temperature
Desirable*

much more active and much freer from constipation. The cooler temperature also promotes better feather growth and whets up the appetite of the chicks.

To bring about a range in temperature in the brooder house where a moderate number of chicks is being brooded, provide some sort of canopy or curtain around the brooder stove hover so that the heat is largely retained under the hover. This gives the chicks a warm spot to run to when they feel cold. You will find chicks running back and forth all day. They are not only active but happy. Where the brooder or brooder house is crowded you cannot follow this practice.

A good many people overrate the capacity of their brooder stoves and brooder houses. When too many chicks are crowded into a brooder house it is hard to provide proper temperatures, adequate air and sufficient feeding space.

*Avoid
Crowded
Brooder*

There has all too frequently been a tendency to try to crowd 300 and 400 chicks in a 8x10 or a 10x10 brooder house when 200 or 250 chicks are all it will properly accommodate. Even then, if the mortality is low, it may be badly crowded before the cockerels are marketed as broilers.

If the chicks can get out doors when they are a week to ten days old, do not fail to let them out. Build a wind break and sweep the snow away if necessary to let them outside. It is then so much easier to teach chicks to come in from the cold wind and rain than if you wait until they are three or four weeks old. Besides the wind and air will help to toughen them and make them more active chicks.

Chicks obtain something from the contact with the ground that they do not seem to get in any other way, which is another reason for getting them out doors. The contact with the ground may be just as vital to them as sunshine. You no doubt have noticed that chicks and hens like to bury themselves in damp ground.

*Teach
Chicks
to Roost*

It is desirable to get chicks to roost at an early age. If you can put roosts into your brooder house by the time the chicks are three to four weeks old, you will greatly simplify the problem of teaching them to roost; then, too, with a cold brooder house there is an inducement for the chicks to climb on the roost as it is usually a little warmer off the floor.

The age at which chicks will start to roost depends upon the weather and just how convenient it is for them to get on the roost. They are not inclined to roost early in extremely cold weather.

As soon as the chicks are roosting, you are sure that the dangers of crowding, sweating, and piling up are over. Low



Tri Maple Farm, East Longmeadow, Mass., Uses Ful-O-Pep Feeds

sloping roosts, either with or without wire underneath, work out very satisfactorily in the brooder house. Be sure that the roosts are smooth. Rough roosts produce sores on the breast bone that will affect the value of the bird when sold for meat purposes.

Just as soon as you can distinguish the sex, separate the cockerels from the pullets. Before long the cockerels will worry the pullets, especially if of the lighter breeds. Besides, the pullets need the room, both on the range and in the brooder house. If you wish to save some of the cockerels for breeders, pick out the thriftiest and fastest growing individuals. The birds intended to be sold as broilers should be crowded for market by extra feeding of mash. If convenient keep the cockerels more or less confined and feed them Ful-O-Pep Broiler Mash.

***Separate
Cockerels
From
Pullets***

If for any reason your chicks should show signs of being constipated, give them a molasses flush. Use one pint of black strap molasses to sixteen quarts of water as the sole drink for one day. Be sure the chicks have this instead of water to drink the first thing in the morning.

HAS USED FUL-O-PEP 6 YEARS: *"I have used Ful-O-Pep Chick Starter for the last six years and like it very much. Growth has been even and have had no loss from cannibalism even when early chicks have been closely confined."* Robert Spengler, Tri Maple Farm, East Longmeadow, Mass.

The Ful-O-Pep Way of Raising Better Chicks

FIRST SIX WEEKS

EIGHT WEEKS TO MATURITY
ON RANGE

SIX TO EIGHT WEEKS





Schippers Poultry Farm & Hatchery, Edgewater, Colo., Can Be Proud of These

Feeding Directions

THE Ful-O-Pep Plan of Feeding is designed to grow large sized, firm-bodied, sound-boned, healthy pullets that will live and lay for several years. We do not believe in nor recommend feeding heavily of a high protein mash feed which will mature pullets in three or four months' time. We know that this means lower vitality, shorter life, smaller birds, and smaller eggs.

*Feed the
Chicks
on Arrival*

Have Ful-O-Pep Chick Starter ready when the chicks are put in the brooder. As soon as the chicks are received or can be taken out of the incubator, feed them. Do not starve chicks for twenty-four hours or longer. Be sure to provide plenty of hopper space, flats or trays, so all the chicks can eat. Have fresh, lukewarm water available. Cold water may severely injure the chicks and should be avoided.

Sprinkle some fine granite grit, or even coarse, sharp sand and charcoal on top of the Ful-O-Pep Chick Starter. A little

PLEASED WITH THE GROWTH: "The 800 chicks we have on Ful-O-Pep are certainly doing wonderful. They are now 5 weeks old and I believe they are some of the finest developed chicks we have ever had. When they are old enough we will feed Ful-O-Pep Egg Mash and continue with the Ful-O-Pep Method of feeding." J. C. Schipper, Schippers Poultry Farm and Hatchery, Edgewater, Colo.

Ful-O-Pep Fine Chick Feed should be fed on top of the mash at night. Continue feeding the Fine Chick Feed on top of the mash until the chicks are three weeks old. At that time change to Ful-O-Pep Coarse Chick Feed and begin feeding the Coarse Chick Feed in the litter or else on the ground at night.

*Give
Chicks
Grain*

We want the chicks to learn the difference between feed and litter; in fact we want the chicks to eat some litter. It is very much better for the chickens to eat a certain amount of fibre out of the litter than to pick feathers from each other.

When you change to Ful-O-Pep Coarse Chick Feed be sure that you change to medium size granite grit. Give the birds just as big a grit as they can handle. Also, be sure that the grit is a hard acid insoluble grit, for the so-called limestone grit is ineffective for grinding purposes.

At six weeks of age, change the chicks from Ful-O-Pep Chick Starter to Ful-O-Pep Growing Mash, and continue feeding the Coarse Chick Feed in the litter at night. When eight to ten weeks old put in a hopper of whole oats and change the Ful-O-Pep Growing Mash to Ful-O-Pep Developer.

*Change to
Ful-O-Pep
Developer*

We are assuming that the pullets have been running out doors on a grass range. If for any reason the birds have to be kept confined, continue to feed Ful-O-Pep Growing Mash. Ful-O-Pep Developer is intended purely as a range feed for growing stock.

The hopper of oats must be smooth oats so that the birds can eat them readily. The heavy, thick hulled oats with long awns or barbs cause birds a good deal of distress when they stick in their throats. The small, thin hulled cereal oats, such as our Akron, Imperial or Jemima Oats are ideal for this use. Clipped oats are also satisfactory.

When the birds are six weeks old or by the time they weigh a pound, the grit should be changed from medium or coarse chick sized grit to hen sized grit. Chickens cannot properly take care of whole oats unless they have large enough grit to do the grinding. Oats require a great deal more grinding or pressure than other grains. Only an acid insoluble grit such as granite grit can be expected to work satisfactorily when feeding whole oats.

*Chickens
Require
Proper Grit.*

When the birds are running out on range it is more desirable to feed the grain out on the ground, rather than attempting to throw the grain in the litter in the colony house. The amount of Ful-O-Pep Coarse Chick Feed to give will vary from day to day depending upon the weather. In hot weather the birds will not eat as much grain as in cold weather. You will

have to use your judgment from day to day as to the amount to feed the birds.

**Feed
Grain
Liberal**

By the time the pullets are ten to twelve weeks old they should eat at least two or three times as much grain as mash. When referring to grain we mean the combination of the whole oats in the hopper and Ful-O-Pep Coarse Chick Feed thrown on the ground. This heavy grain feeding promotes slower growth, insures better egg size, and reduces trouble from worms.

When the chicks are six to ten weeks old and are on a fair range restrict mash and oats feeding to two or three hours in the morning. Put in the hoppers what they will clean up in that time. After the chicks are ten weeks old and are running on a good grass range don't feed anything two days a week, as for instance, do not feed on Wednesday and Sunday.

In hot weather be sure to keep a supply of fresh water in the shade near the feed. Pullets will not venture out in the hot sun to get a drink. They are frequently severely injured by constipation due to not having water properly available.

**Provide
Clean
Water**

Do not put any disinfectant in the drinking water at any time. You cannot disinfect a chicken's insides. The birds object to some disinfectants and in turn will not drink enough water. Constipation is the result, which is far worse than any possible advantage gained using the disinfectant. It is quite all right to disinfect the drinking fountains, but don't put the disinfectant in the water.

Feed as much hen size granite grit as the birds will eat. They should eat about five per cent by weight of the total feed consumed. If grit is not properly supplied, the grain is not thoroughly ground up and goes through the intestines undigested. This is not good for the chickens and is very wasteful of feed.

By the time the birds are ten to twelve weeks of age put in the hoppers enough Ful-O-Pep Developer and enough oats to last the birds until nine or ten in the morning. We believe that the birds will develop a more active condition of the intestines and be stronger. Late in the afternoon feed Ful-O-Pep Coarse Chick Feed. Don't give the pullets all the grain they will eat.

Most poultry men keep feed in front of the birds too much of the time. Restricted feeding, applied sensibly, will result in raising big, capable pullets on less feed.





Raised the Ful-O-Pep Way by Arthur E. Flynn, Adams, N. Y.

Watch the physical condition of the birds. At the first signs of constipation flush them with blackstrap molasses using a pint to four gallons of water. Give this as the drink for one day. Have it available the first thing in the morning.

When pullets are housed in winter quarters or are six months old and eggs are desired, change from Ful-O-Pep Developer to Ful-O-Pep Egg Mash. It contains all of the essential egg building materials.

Feeding isn't everything in getting high production, but it certainly plays an important part. The method outlined here is the one many of the breeders have been using who have been making egg laying contest history. It is far easier to get lots of big eggs from pullets that have had a chance to develop properly and build a reserve before coming into production. Best of all, this method means lowered feed costs.

**Feeds
Determine
Future**

Ful-O-Pep Mashs are balanced as you find them in the blue and white striped sack — for best results feed them according to the Ful-O-Pep Feeding Plan.

FOR FEEDING BROILERS SEND FOR OUR SPECIAL BROILER FOLDER.

LOST ONLY 11 CHICKS: *"I started using your feeds this year and followed your system from the start. At the age of nine weeks I had broilers averaging 2½ pounds each and the sale of broilers more than paid for the feed bill for the whole flock to that time. Moreover, I lost only 11 chicks out of 316. My flock of pullets are now five and a half months old and average at least 5 pounds each."* Arthur E. Flynn, Adams, N. Y.

Ful-O-Pep Mash

*Ful-O-Pep
Produces
Results*

POUTRYMEN for years have had exceptional results with Ful-O-Pep Feeds. Their chicks have had very little trouble from crooked legs. They have had little trouble from cannibalism and they have had exceptionally fine livability and good egg production.

Poultry Research workers are very busily engaged in trying to find out why certain practices are correct. Each year new experimental evidence shows that various ingredients in Ful-O-Pep Mash are exceptionally good sources of some vital food nutrient which is so necessary to growth, health, and reproduction of chickens.

*Oats
Contains
Manganese*

Ful-O-Pep Feeds have always been built around oatmeal, and science is just beginning to unfold the many ways in which oats are superior to other cereal grains. We know that a chicken needs manganese for good bones and for good hatches. Recent work at the University of Kentucky has shown that if eggs are deficient in manganese, you may hatch monsters or the eggs may fail to hatch. They have demonstrated that by injecting a little manganese into the egg they could eliminate these monsters. Since oats contains over twelve times as much manganese as corn, it is easy to understand why these monsters have not appeared in eggs hatched from Ful-O-Pep-fed flocks.

The fact that manganese is so closely related to slipped tendons or crooked legs in battery raised chicks it again shows the importance of feeding a ration rich in oatmeal to both the breeding stock and to the chicks. We know that chicks which come from Ful-O-Pep-fed hens have little or no difficulty with slipped tendons when they are fed on Ful-O-Pep Chick Starter or Ful-O-Pep Broiler Mash.

*Ful-O-Pep
Supplies
Vitamin G*

You may remember years ago our announcing the exceptional results obtained from the use of cod liver meal and molasses in Ful-O-Pep Feeds. We knew they made a great improvement in the feed. Now we know that they are exceptional sources of vitamin G, one carrying the flavin factor and the other the filtrate factor of vitamin G.

Over a period of years many of the egg-laying contest winners have been raised on Ful-O-Pep Feeds. Three pens that were raised on Ful-O-Pep Feeds at different times have made new world egg-laying contest records. In the egg-laying contest of 1936-37, W. C. Mullins of Handley, Texas, had a White Leghorn hen in the Texas contest that made a record of 349.4 points. Ful-O-Pep Feeds and the Ful-O-Pep Feeding Program will raise the finest quality of pullets with a minimum of mortality and at a minimum of feed cost.



A Good Range for Young Stock, L. Russ, Lakewood, N. J.

Range Rearing

THE ideal way to raise chicks would be to get them out on a fresh grass range when they are a week to ten days old. Unfortunately, in many parts of the country a grass range just simply doesn't exist at the time the chicks are hatched. The poultrymen that are able to put the chicks on range at an early age find it much easier and cheaper to raise their pullets.

While it may not be possible to get your chicks outdoors on a grass range in February or March in the northern states, you may be able to get them out into small yards by sweeping away the snow. We believe it is highly desirable to get the chicks outdoors even though there is snow and ice still on the ground. In so doing, you toughen or harden the birds, give them exercise, and you help them to really grow into sounder birds.

There is no particular object in providing more space than the small exercise yard until after the grass is up far enough

**Get
Chicks
Outdoors**

HAS FED FUL-O-PEP 8 YEARS: *"We have used Ful-O-Pep for 8 years. We believe that a slow growing bird is more solid, with firmer flesh and makes layers that stay in production longer. We approve of your method of feeding whole oats to growing stock."* L. Russ, Lakewood, N. J.

so that the birds will not kill it. A short grass range is undoubtedly the most satisfactory range for growing chicks. We think it far superior to an alfalfa or clover field.

**Chicks
Prefer
Grass**

Almost regardless of the kind of grass, chicks seem to prefer it to practically any other kind of green food. We do not believe that chicks would be so keen about grass if it didn't have a greater value for them. We know that short tender grass is high in protein, high in vitamins and rich in minerals. It is nature's way of supplying the major part of the feed for all kinds of livestock.

While we prefer rotating the range, we do not think it especially serious to use the same range year after year just as long as you have a good grass sod. By rotating the range you ordinarily can give the chicks a better sod.

**Rotating
Range Not
Necessary**

We have known too many poultrymen who have raised exceptionally fine pullets without moving their colony houses for ten to fifteen years to worry a great deal about rotating the range each year. If you have too many birds on the range so that they kill the grass sod, it is quite important to rotate. You will raise better pullets and ordinarily with less trouble.

Where the young stock is running on a good grass range they require a low protein, high fiber mash feed. It is surprising the amount of protein the pullets do obtain from fresh growing stuff. A high protein mash in addition to the green stuff has a tendency to force pullets to maturity and into egg production far ahead of the time nature intends pullets to lay.

We built Ful-O-Pep Developer especially for pullets on range. It is largely made up of choice cereal grains including oat products. Ful-O-Pep Developer tends to delay early maturity and promotes larger body size and stronger frames — the kind of birds you take a delight putting into the laying house.

**Feed
Growing
Mash**

For the poultryman who finds it impossible to provide a grass range, we would recommend Ful-O-Pep Growing Mash. This feed has been carefully developed and thoroughly tested for raising pullets in confinement. We believe it possible to provide the things supplied by the grass in the mash. You can raise fine big pullets on Ful-O-Pep Growing Mash, fed the Ful-O-Pep Way. It will cost slightly more though to raise pullets in confinement than to raise pullets which have access to a good grass range.

RECOMMENDS FUL-O-PEP: *"We have been raising turkeys for 3 years and for the past 2 years we have used Ful-O-Pep Turkey Starter and Grower exclusively which we consider by far the best we know of. We gladly recommend it to turkey raisers."* Waverly Poultry Farm, Raymond, Miss.



A Thrifty Flock of Turkeys at Waverly Poultry Farm, Raymond, Miss.

Turkey Raising

TURKEYS are really quite easy to raise. Many poultrymen use their brooding equipment first for chicks and then use the same equipment for turkey poults. May and June are the two months that the bulk of our holiday turkeys are hatched, so turkeys do work in very well with chickens.

While turkey poults can readily enough be raised on the same farm with chicks, they should be kept separate. Start the poults in confinement. After they are old enough so they no longer need heat, they may be moved into range shelters out on range.

Turkey poults, particularly during the early brooding period, require an amazing amount of vitamins and proteins in their feed. They need practically twice as much of these important food nutrients as do chicks. Ful-O-Pep Turkey Starter with its milk, fish meal, cod liver meal, molasses, oatmeal, fortified sardine oil, and dehydrated alfalfa, is exceedingly rich in the things poults need for rapid growth.

If you are going to raise a flock of turkeys, we would suggest that you write for our special turkey folder. We discuss fully the handling and feeding of poults in this folder.

***Ful-O-Pep
Produces
Fine Birds***



Started Chick Room at The Smith Chickeries, Mexico, Mo.

Let's Increase Egg Consumption

THEY tell us that egg consumption is low. Is there anything that we, as poultrymen, can and should do about it?

When we consider that eggs are comparatively cheaper than other animal products it is hard to understand why people do not eat a great many more eggs. Eggs are probably the most complete food we eat. They are a concentrated source for vitamins, minerals, and proteins. They are easily digested and taste fine when cooked in dozens of ways.

*How You
Can Do
Your Part*

Are you eating as many eggs as you should to keep yourself in the best physical condition? Are you encouraging your friends and neighbors to eat more eggs? There are many ways that your local newspaper can help by featuring the value of eggs and showing recipes for dishes that take eggs. Let's all help boost the egg consumption this year. It will mean better prices for eggs and in turn greater profits to the poultry industry.

It, of course, is one thing to increase consumption of eggs and another thing to supply a product that satisfies the consumer so he continues to eat them. Don't fail to do your part as a poultryman. Feed your hens a well balanced ration, keep the house and nests clean, gather the eggs several times a day, and handle them so they retain their original goodness.



An Ideal Range on the Alachua Poultry Farm, Alachua, Fla.

Chick Troubles

Bronchitis

BRONCHITIS has been rather common with chicks the last few years. It is not at all uncommon for a flock of chicks to develop a case of sniffles or have difficulty in breathing when they are a week old. Unless care is taken, the mortality can run pretty high. When bronchitis gets onto a farm, it is quite apt to spread from one lot of chicks to another.

For treatment we would handle the chicks as though they had a cold. Decidedly restrict the amount of feed they are given. Since chicks with their noses filled have a good deal of difficulty eating a dry mash, we would recommend moistening the Ful-O-Pep Chick Starter and feed it lightly two or three times a day. At night give them a light feeding of Chick Feed. Most poultrymen make the mistake of trying to stuff a bird that does not want to eat, with fatal consequences oftentimes.

Chicks that are hungry and active, especially if they are running outdoors and getting air and sunshine, plus bugs and grass, will very often throw off bronchitis with little mortality. Spraying with some inhalant may be helpful, though none of them seem to give uniform results.

HAS LOW MORTALITY: *"This is the third year I have fed Ful-O-Pep Chick Starter. February 9, I bought 7,000 day old White Leghorn chicks. They are now five weeks old and have lost only 47 chicks. I believe that Ful-O-Pep Chick Starter will speak for itself wherever fed." George Duke, Alachua Poultry Farm, Alachua, Florida.*



Mrs. James W. Bartosh, Pocahontas, Iowa, has a Uniform Flock

Cannibalism

A good test of a feed and a feeding program, as well as brooding methods, is the amount of cannibalism in the flock. With feeds that are high in corn and low in oatmeal, it is very difficult to prevent cannibalism. As long as you are using Ful-O-Pep Chick Starter and following the Ful-O-Pep Feeding Program, there is just one thing you need to watch and that is to keep temperatures down. Chicks that are closely confined in hot brooder houses, in spite of the fact that there is no deficiency in the ration, will develop this vice.

Coccidiosis

We believe that we can properly divide coccidiosis into two groups—one due to mechanical difficulties in the feed, and the other nutritional. A large per cent of the bloody droppings that you find in a flock of chicks comes from the chicks either eating grass or litter without being able to grind it up before reaching the intestines. When you fail to feed granite grit or the chicks fail to eat it, the likelihood of running into trouble is very much greater. As long as chicks get out on range and pick their own grass, there isn't the danger of bloody droppings, but when you feed cut

SPEAKS WELL OF FUL-O-PEP: "After 10 years of jumping from one kind of feed to another I finally tried Ful-O-Pep and found that it is not only—A better way to raise chicks—but—The best way to raise chicks. When two months old my chicks weighed 2¼ pounds and were well feathered and healthy. I am an enthusiastic booster of Ful-O-Pep Feeds and recommend it to all my friends." Mrs. James W. Bartosh, Pocahontas, Iowa.

grass and they eat long streamers of it, or they eat it after the grass has dried out, it is quite apt to tear the large intestine, causing bleeding.

Since the ceca is the only place that fiber is digested, a good deal of fibrous material is pushed up into the ceca. If this is rough, coarse, and tough, it is quite apt to injure the lining here and cause bleeding. Avoid feeding tough, dried grass or anything else the chicks cannot handle.

The second type of coccidiosis we believe is due to feeding excessive lime or giving feed that does not produce a fairly high acid condition of the gizzard. The liberal content of oatmeal in Ful-O-Pep Mashers helps to produce a higher degree of acidity in the gizzard. We feel sure that this gives greater protection against all kinds of parasitic invasion.

The University of Wisconsin recently pointed out that feeding an excess of lime makes chicks more susceptible to coccidiosis. As long as you use Ful-O-Pep Mashers and follow the Ful-O-Pep Feeding Program, we are confident that your troubles from coccidiosis will be at a minimum.

Constipation

Constipation probably causes heavier chick losses than anything else. Unfortunately many people believe the whitish discharge sticking to the down below the vent primarily due to white diarrhea rather than due to constipation. When a chick is constipated the urine runs down the abdomen. It may or may not be accompanied by pullorum disease.

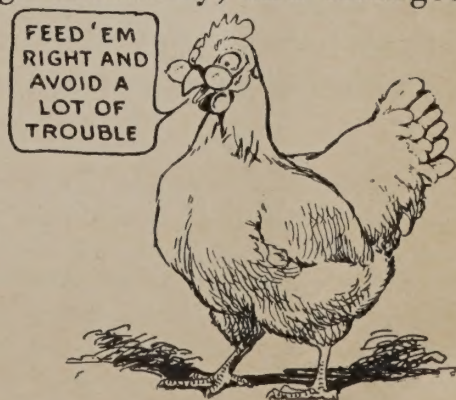
Most chicks show constipation very plainly before it becomes serious. They hunch up and their tails droop. This is particularly evident in White Leghorns. Constipation is due to overheating, overcrowding, and overfeeding. We suggest that you watch all three of them.

Many poultrymen have found that using black strap molasses in the drinking water at the rate of a pint to sixteen quarts of water as the sole drink for a day is very helpful in cleaning up constipation. Be sure to give this the first thing in the morning before the chicks drink any water. We also would recommend hand feeding the chicks so as to whet up their appetite.

Do not use baking soda as a flush for chicks. Experiment stations have shown that it may result in cases of gout, a high mortality, and enlarged kidneys. It is one of the most dangerous things that can be given chicks.

Range Paralysis

Many poultry flocks have been severely affected by laying house mortality due to the pullets going blind, losing the use of a leg or wing, enlarged livers, and frequently internal tumors. There are a number of factors in-



volved in range paralysis. Some strains of birds that have had range paralysis and worked out of it, seem to build a resistance in so far as future generations are concerned.

Range paralysis has been most severe in those flocks where the birds have been heavily fed on mash, pushed to early maturity, and have been fed considerable lime in the mash or separately.

We are confident that if you will follow the Ful-O-Pep Feeding Program, restricting feed and supplying whole oats, your losses from range paralysis will be relatively small. We urge you to try Ful-O-Pep Mash and the Ful-O-Pep Feeding Program if you have had trouble in the past with range paralysis.

Worms

Worms have been and still are a very serious pest on a great many poultry farms. If you do not know whether you have any worms in your flocks, we would suggest that you examine the droppings carefully. In the case of tape worms, the segments will be found in the fresh, warm, moist droppings. If the flock is badly infested with tape worms, you will find jelly-like masses at least on every fourth or fifth dropping. If you have to hunt around for fifty to one hundred droppings before you can find one tape worm segment, you can be sure that you have a relatively mild infestation of tape worms.

In cutting open chickens to determine whether or not they have tape worms, be sure that you do not take the bird that can hardly walk because the worms have deserted such a bird. Open up one that is in pretty fair condition, split the intestine and dip it in a dish of water. If infested you will find the worms hanging threadlike from the intestines.

We are confident that if you will follow the Ful-O-Pep Feeding Program of restricted feeding, and use whole oats freely, your flock will not be bothered with worms. On our experimental farm we had tape worms and round worms in quantity year after year until we began using this feeding program. The worms have practically disappeared for the last four years and we have not wormed the flock.

Probably the quickest way to get tape worms out of chickens is to starve them on alternate days for a week or two and feed them on pulverized or whole oats on days they get feed. This, of course, is only possible with pullets before they begin to lay and while they are still on range. We would not recommend it for a flock of laying hens.

RECOMMENDS FUL-O-PEP TO CHICK CUSTOMERS: *"We have developed quite a large demand for started chicks from one to four weeks of age. We brooded and sold more than one hundred thousand started chicks this spring and they were all fed the Ful-O-Pep Way. Our average mortality was under 5% and the chicks feathered nicely and the bone development was perfect. We cannot recommend Ful-O-Pep too highly to our customers. We feel they have a better chance to successfully raise our chicks if they are feeding Ful-O-Pep."* Floyd B. Smith, The Smith Chickeries, Mexico, Missouri.



These Well Developed Birds Belong to Edgar J. Willeford, Greensburg, Ind.

World's Poultry Congress, Cleveland 1939

IN July and August of 1939 you will have the opportunity of seeing the finest educational display and the best poultry show that the world has ever seen. With leading poultry authorities from all over the world giving lectures at the Congress, with a tremendous display of equipment and supplies, with leading poultry breeders from all over the world exhibiting and attending, we are confident that it will be one of the most instructive, as well as one of the most enjoyable meetings you have ever attended.

Begin to save money for it now just as you would a Christmas club, and make plans to have some one take care of your chickens so that you will be free to attend. We expect that it will be the world's best Poultry Congress and the world's best attended Poultry Congress. You don't want to miss it.

Remember the dates, Cleveland, Ohio, July 28 to August 7, 1939.

FEED CONSUMPTION LOW: "Net profits from my laying flock last year were so high that Ful-O-Pep was the only feed even considered for the chicks last spring. Just four months old our Barred Rock pullets are the finest we have ever raised and the most economical too. Feed consumption has been low—almost no mortality. The birds are well fleshed, uniform in size and tightly feathered. Edgar J. Willeford, Greensburg, Ind.

Where Ful-O-Pep Feeds are made

